CLAIMS:

1. A data rate controller system for providing control instructions to a plurality of channels on corresponding channel devices operating on a network, the system comprising:

at least one channel providing statistical information about the associated channel signal;

at least one coder provided for running at a certain data rate on each channel device; and

a central controller for interacting with the plurality of channels,

wherein statistical information about each channel signal is used by the central controller to determine the type of coder that should be run on each channel device, with the central controller sending a control instruction to each channel to facilitate implementation of the coder.

2. The data rate controller of Claim 1, wherein the statistical information includes at least lost-frame rate estimation.

3. The data rate controller of Claim 2, wherein the central controller determines if the lost-frame rate is above a set limit, and generates the control instruction based upon this condition.

4. The data rate controller of Claim 3, wherein the control instruction causes a lower-rate encoder to be used on at least a portion of the channels.

5. The data rate controller of Claim 4, wherein the lower rate encoder is determined to fit within the processor resources of the channel.

6. The data rate controller of Claim 5, wherein the lower-rate encoder is determined to fit within the resources of the network.

7. The data rate controller of claim 4, wherein the control instruction causes a lower packetization interval to be used on at least a portion of the channels.

8. The data rate controller of Claim 3, wherein the set limit is approximately two percent.

9. The data rate controller of Claim 1, wherein the statistical information includes at least jitter estimation.

10. The data rate controller of Claim 9, wherein the central controller determines if the esimated jitter is above a set limit, and generates the control instruction based upon this condition.

11. The data rate controller of Claim 10, wherein the control instruction causes a lower-rate encoder to be used on at least a portion of the channels.

12. The data rate controller of Claim 11, wherein the lower rate encoder is determined to fit within the processor resources of the channel.

13. The data rate controller of Claim 12, wherein the lower-rate encoder is determined to fit within the resources of the network.

14. The data rate controller of Claim 10, wherein the set limit is approximately 50 msec.

15. The data rate controller of Claim 1, wherein the statistical information includes at least call discriminator events and system resource utilization.

16. The data rate controller of Claim 15, wherein the system resource utilization includes at least network congestion and processor congestion.

17. The data rate controller of Claim 16, wherein the central controller determines a coder that can support the call in light of the system resource utilization, and generates the control instruction based upon this determined coder.

18. The data rate controller of Claim 17, wherein the control instruction causes a lower-rate encoder to be used on at least a portion of the channels if the network congestion is high.

19. The data rate controller of Claim 17, wherein the control instruction causes a lower complexity coder to be used on at least a portion of the channels if the processor congestion is high.

20. A data rate controller system for providing control instructions to a plurality of channels on corresponding channel devices operating on a network, the system comprising:

at least one channel with means for detecting background noise conditions, and means for providing channel resource utilization and associated network utilization information for each channel;

at least one coder provided for running at a certain data rate on each channel device; and

a central controller for interacting with the plurality of channels,

wherein the noise conditions and the resource and network utilization information, from each channel, are used by the central controller to determine the type of coder that should be run on each channel device, with the central controller sending a control instruction to each channel to facilitate implementation of the coder.

21. The data rate controller system of Claim 20, wherein the background noise conditions are determined to be greater than a set level.

22. The data rate controller system of Claim 21, wherein the set level is approximately –45 dBm.

23. The data rate controller system of Claim 20, wherein the control instruction faciliates upspeeding the coder if the network utilization is low.

24. The data rate controller system of Claim 23, wherein the control instruction facilitates using a more complex coder if the resource utilization information is low.

25. A data rate controller system for allowing a plurality of channels on a network to each select a channel coder that fits an associated network profile, the system comprising:

a network of channels having a plurality of connections, whereby the network forms a profile of allowed data rates that might flow across the connections;

a set of coders associated with each channel on the network; and

a device associated with each channel for detecting source information,

wherein the source information is used by each channel to select an appropriate coder from each set of coders, with each channel thereafter satisfying the profile.

26. The data rate controller system of Claim 25, wherein the source information includes background noise.

27. The data rate controller system of Claim 25, wherein each channel switches to a selected coder in an autonomous manner from other channels.